City of Zurich deploys next generation data center to improve services and reduce costs

EXECUTIVE SUMMARY

CUSTOMER NAME
- OIZ (City of Zurich IT division)

LOCATION
- Zurich, Switzerland

INDUSTRY
- Local government

COMPANY SIZE
- 25,000 employees

BUSINESS CHALLENGE
- Increase business application performance and reliability
- Ensure mission-critical systems are robust and available 24/7
- Continue to improve the quality of service provided to the community

NETWORK SOLUTION
- Cisco Data Center 3.0 next generation Data Center Networking architecture
- Cisco Application Networking Services
- Cisco Storage Area Network

BUSINESS VALUE
- Improves the quality of service provided internally and to the community
- Reduces data center costs by rationalizing and maximizing use of resources
- Consolidates about 60 decentralized server locations into just a few datacenters (operated by OIZ)
- Makes data center support and maintenance more efficient
- Increases reliability and performance of business systems and applications

The local government in Zurich has deployed a Cisco Data Center Networking solution which is helping to increase quality of service to the community, improve reliability and performance of business systems and reduce the cost of computing resources.

Business Challenge

Zurich is Switzerland's largest city and although not its official capital it is the country's commercial and cultural center and one of the world's pre-eminent financial centers. It is also one of the wealthiest cities in the world and, according to several surveys, one of the healthiest places to live. Within the finance department of the City of Zurich Council is OIZ (Stadt Zürich Organisation und Informatik) the Council's IT department. With around 250 people, it manages all the networking and business systems for the city (except specialized applications and infrastructure).

One of the key responsibilities of OIZ is to develop and maintain several mission critical applications which need to be available 24/7 for the Council. As well as local government administration operations, OIZ is, for example, also responsible for engineering and supporting the network for the police and various other organizations within the Council. E-government services which have to be available all the time will become also more and more important. There are also special services that rely on effective networking facilities such as Mobile IP (Mobile Internet Protocol) communication out of police cars, capturing and communicating video surveillance for large events like the 2008 European Football Championship. The Council is also about to launch a voice over Internet Protocol (VoIP) service for Council staff.

Maintaining these systems and applications at peak performance, ensuring users have the information they need to provide an efficient service to the community and introducing new services and functionality meant that OIZ needed its data center to operate more effectively.

Alfred Stangl, network architect at OIZ, says, "The City of Zurich's networking strategy is built around Cisco technology which has proved to be robust and effective. So there would have to be a very good argument for us to change vendor for our data center operations. Cisco's data center networking technology met 95 percent of our requirement. Another strong point in Cisco's favor is the way its technology integrates – it makes scalability and adding new networking services so much easier."

Network Solution

As part of the Cisco Data Center 3.0, next generation Data Center Networking architecture, OIZ is deploying a number of Cisco Data Center Networking solutions. The latest of these is a Cisco Application Networking Services solution based upon the Cisco ACE (Application Control Engine). Cisco ACE is designed to increase availability, scalability and security of essential business applications, help to facilitate data center consolidation, enhance IT efficiency and improve user experiences and productivity. OIZ is using Cisco ACE to virtualize business applications across servers to increase performance and maximize data center resources.

Already deployed in the data center is a Cisco Storage Area Network (SAN) which OIZ also uses to help improve resiliency, increase business responsiveness, and keep up with the growing demands of new applications while reducing overall power consumption.

The Cisco Data Center Networking solution is part of a comprehensive networking infrastructure which includes a Wide Area Network (WAN) around Zurich, and Local Area Networks (LANs) at various Council offices and locations across the city, all implemented using Cisco equipment.

The Cisco Data Center Networking solution at OIZ is being implemented by Cisco Registered Partner EMC Computer Systems AG/SA for the SAN and Gold Certified Partner NextiraOne for the ACE solution.

Business Results

"A major benefit of Cisco's data center strategy and technology is helping OIZ and the Council deliver a better service to the local community," says Stangl. "That runs from making sure Council staff have the systems and information they need to respond effectively to enquiries from citizens, to enabling the new applications we are planning which will provide more e-government services so that citizens can communicate and interact with the Council more efficiently."

By enabling OIZ to vitualize applications and data storage, the Cisco data center solution is helping OIZ improve application performance and reliability and rationalize and use data center resources more efficiently which in turn increases staff efficiency and productivity.

Because Cisco ACE allows applications to be shared across servers, when repairs or maintenance are required on a particular server, it is easy to switch the application to another server making maintenance and change much quicker and simpler to implement.

Using Cisco Application Networking Services and SAN technologies to increase data center virtualization has meant resources like servers and data storage can be used more efficiently. A Cisco SAN, for example, provides for virtualization so that instead of devices being dedicated to specific applications, they can be shared across multiple systems.

PRODUCT LIST

Routing and Switching
- Cisco Catalyst 6500 Series Switches

Application Networking Services
- Cisco ACE Application Control Engine Module
- Cisco ACE GSS 4400 Series Global Site Selector Appliances

Storage Networking
- Cisco MDS 9500 Series Multilayer Directors

Cisco is also playing a key role in helping OIZ further develop its next generation data center infrastructure. Historically, around 60 separate server locations had grown up associated with different Council departments and physical locations around the city. OIZ is now consolidating these into only a few data centers in Zurich (currently 6500 servers running around 1000 applications). By using Cisco to virtualize network services and the SAN, all of the Council's business systems can be centralized (except some specialized applications operated by individual divisions). The added benefit of this is much better control of computing services because operations like security, back up and data management are all handled in one place.

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Alfred Stangl, Network Architect, OIZ

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